

# Weather/Climate Update



Photo: Washington Post

*Jeff Andresen*

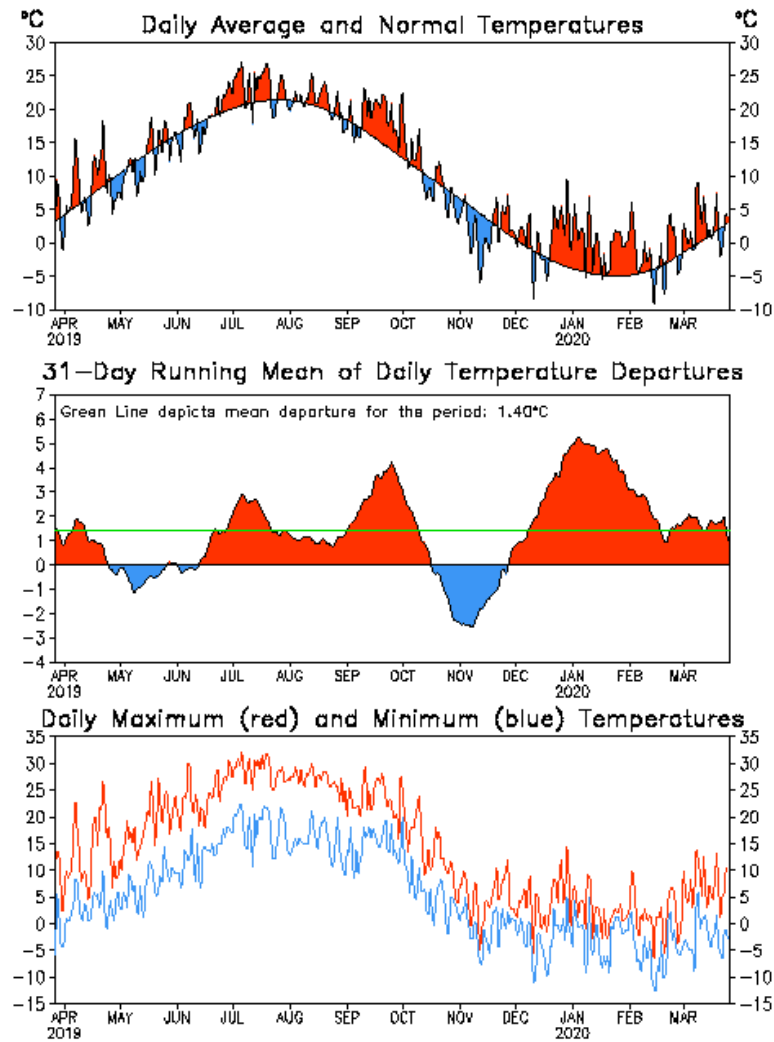
*Dept. of Geography, Environment, and Spatial Sciences  
Michigan State University*

Great Lakes Climate and Lake Levels Update and Outlook Webinar



# A Milder Than Normal Winter

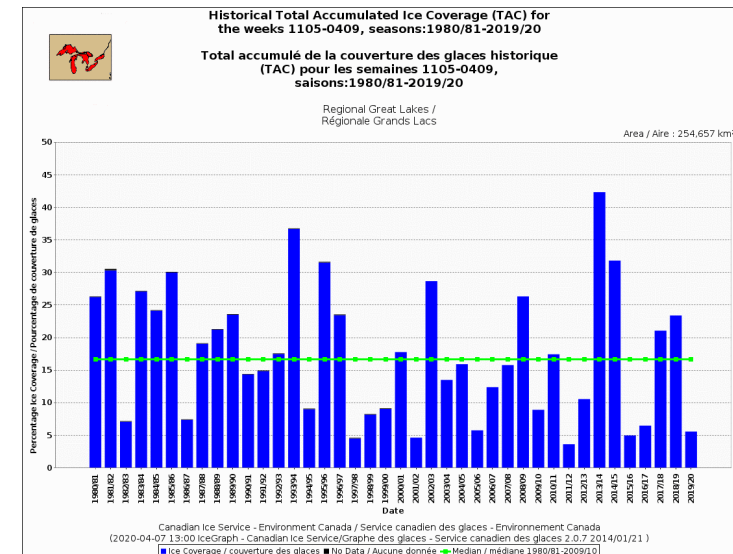
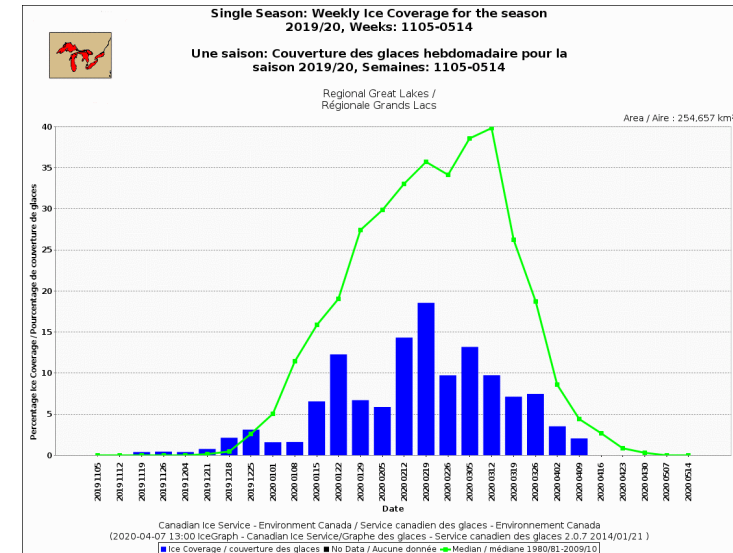
## MUSKEGON, MICHIGAN



Data updated through 25 MAR 2020

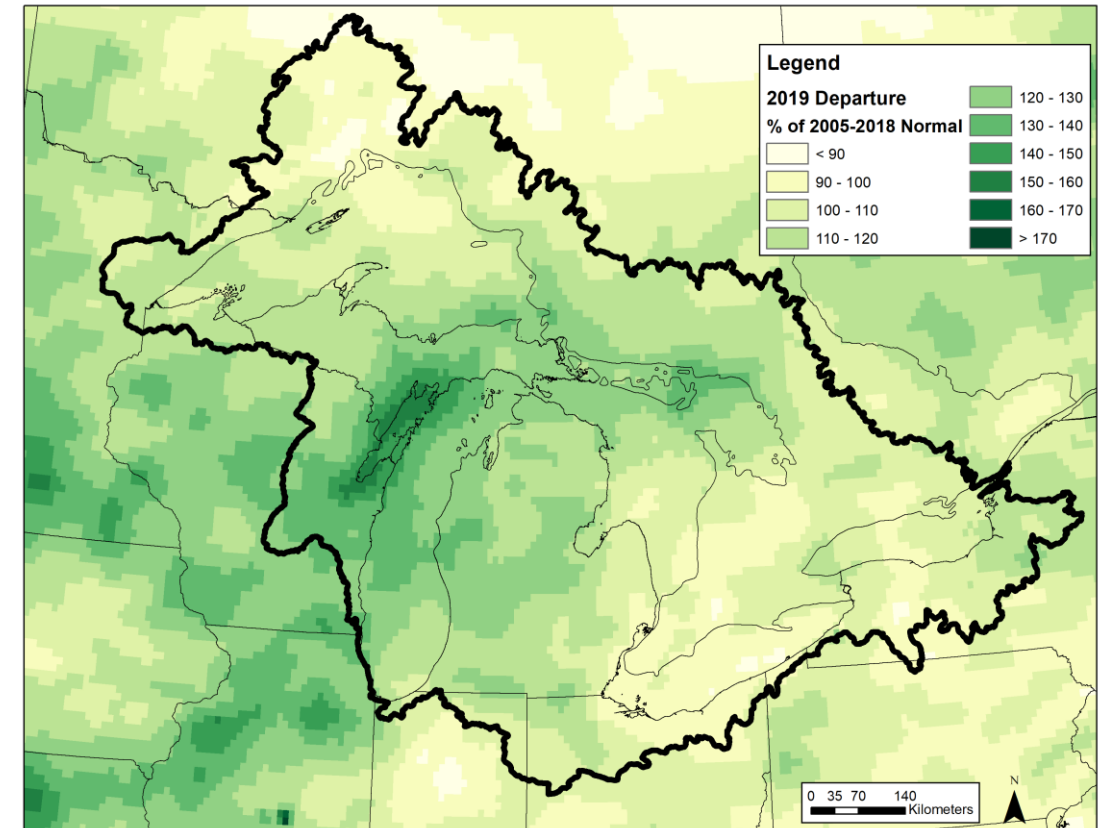
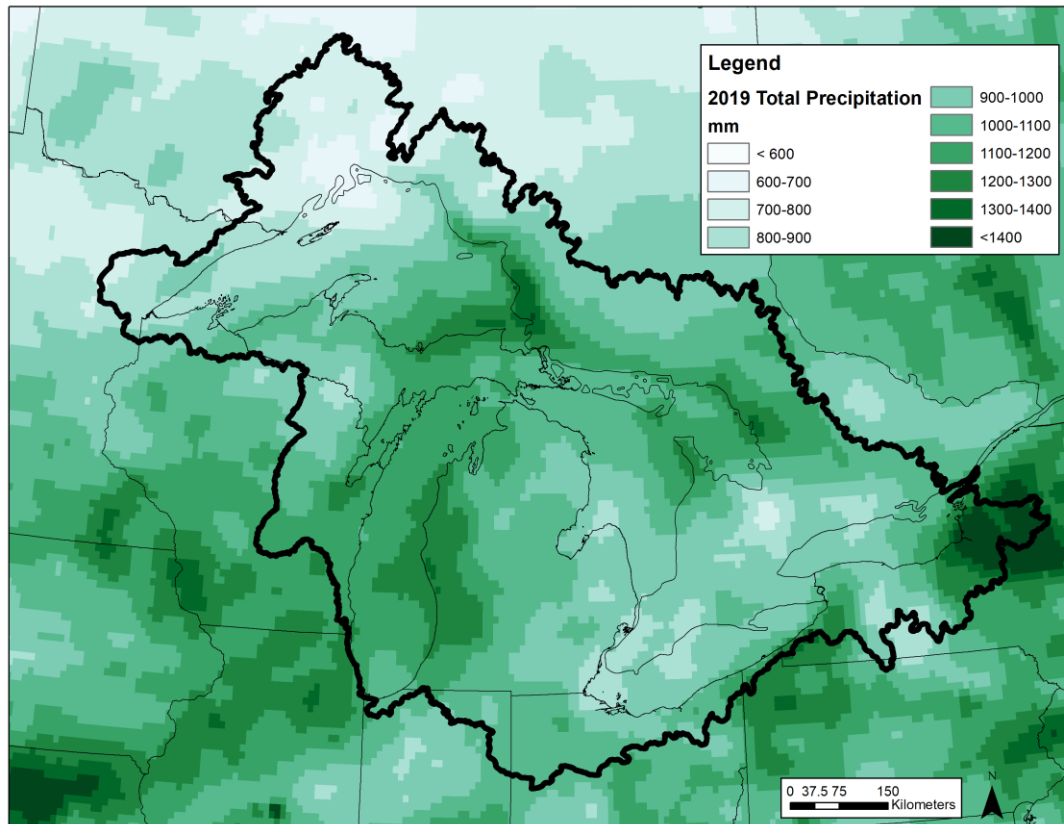
CLIMATE PREDICTION CENTER/NCEP

[https://www.cpc.ncep.noaa.gov/products/global\\_monitoring/precipitation/sn72636\\_1yr.gif](https://www.cpc.ncep.noaa.gov/products/global_monitoring/precipitation/sn72636_1yr.gif)



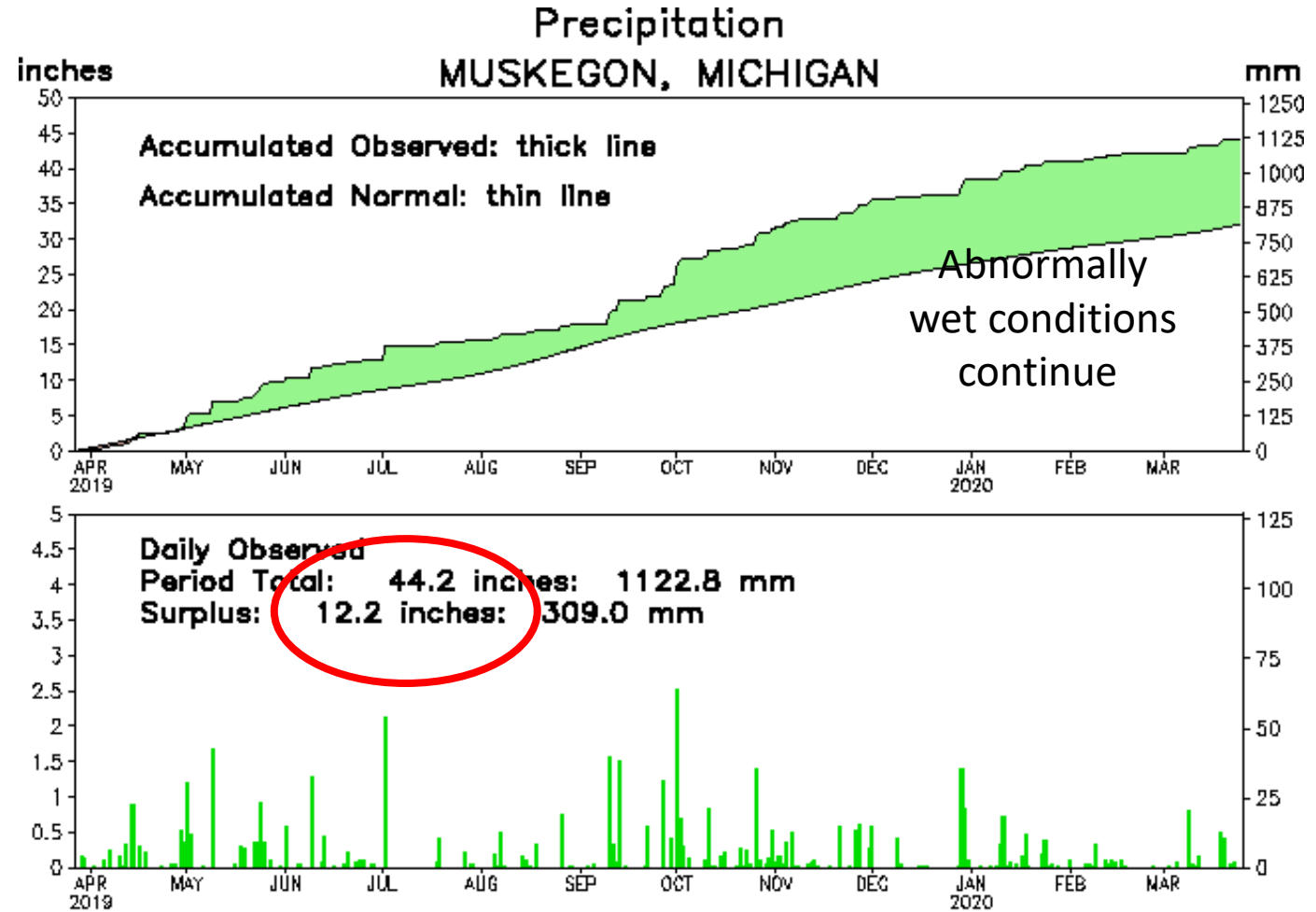
<https://icweb1.cis.ec.gc.ca/Prod/page2.xhtml?CanID=11080&lang=en&title=Great+Lakes>

# Another wetter than normal year across most of the Great Lakes Basin



# Daily Precipitation

APR 2019 – MAR 2020



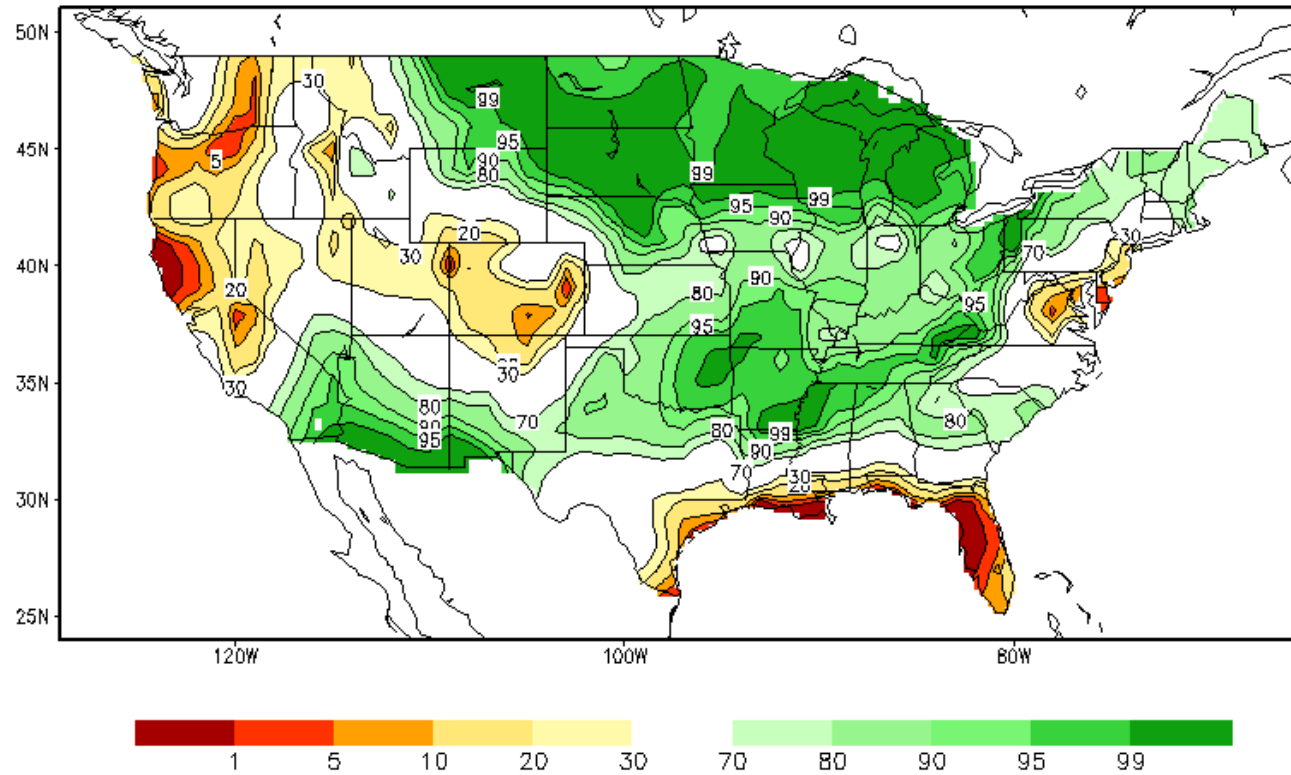
Data updated through 25 MAR 2020

CLIMATE PREDICTION CENTER/NCEP

[https://www.cpc.ncep.noaa.gov/products/global\\_monitoring/temperature/sn72636\\_1yr.gif](https://www.cpc.ncep.noaa.gov/products/global_monitoring/temperature/sn72636_1yr.gif)

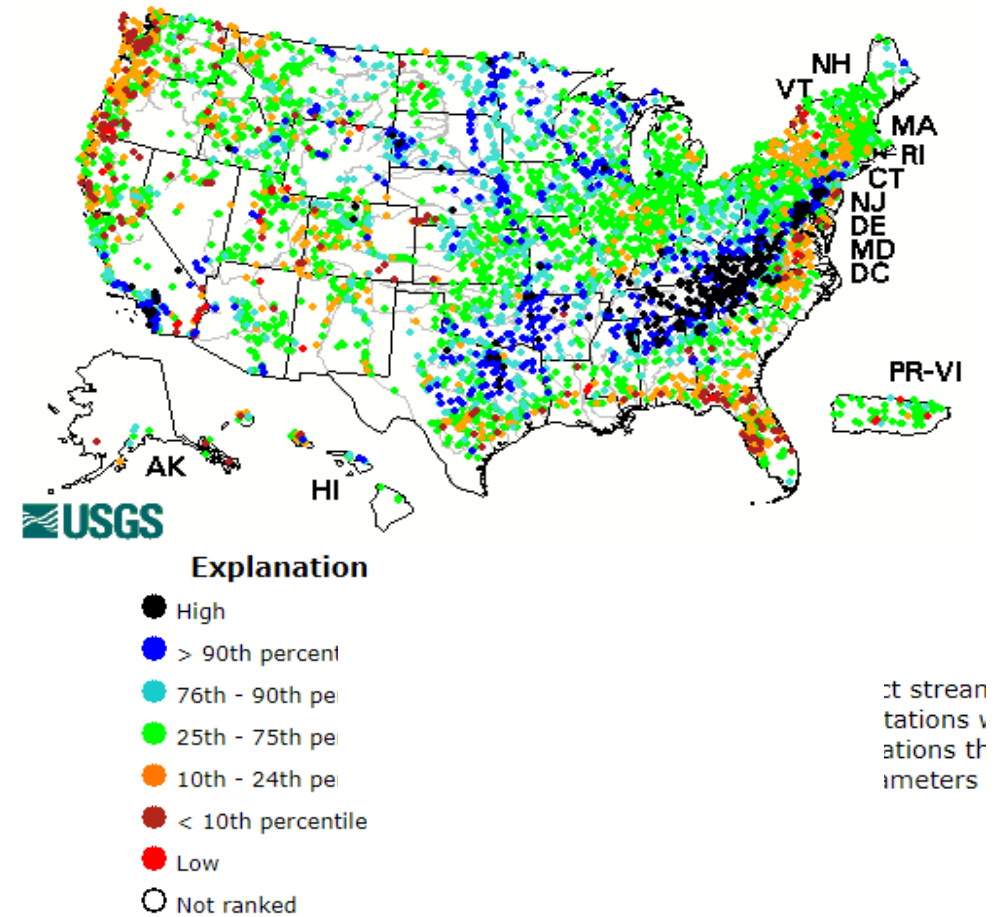
# Soil Moisture and Streamflow Conditions

Calculated Soil Moisture Ranking Percentile  
APR 11, 2020



Daily Streamflow Conditions

Monday, April 13, 2020 08:30ET

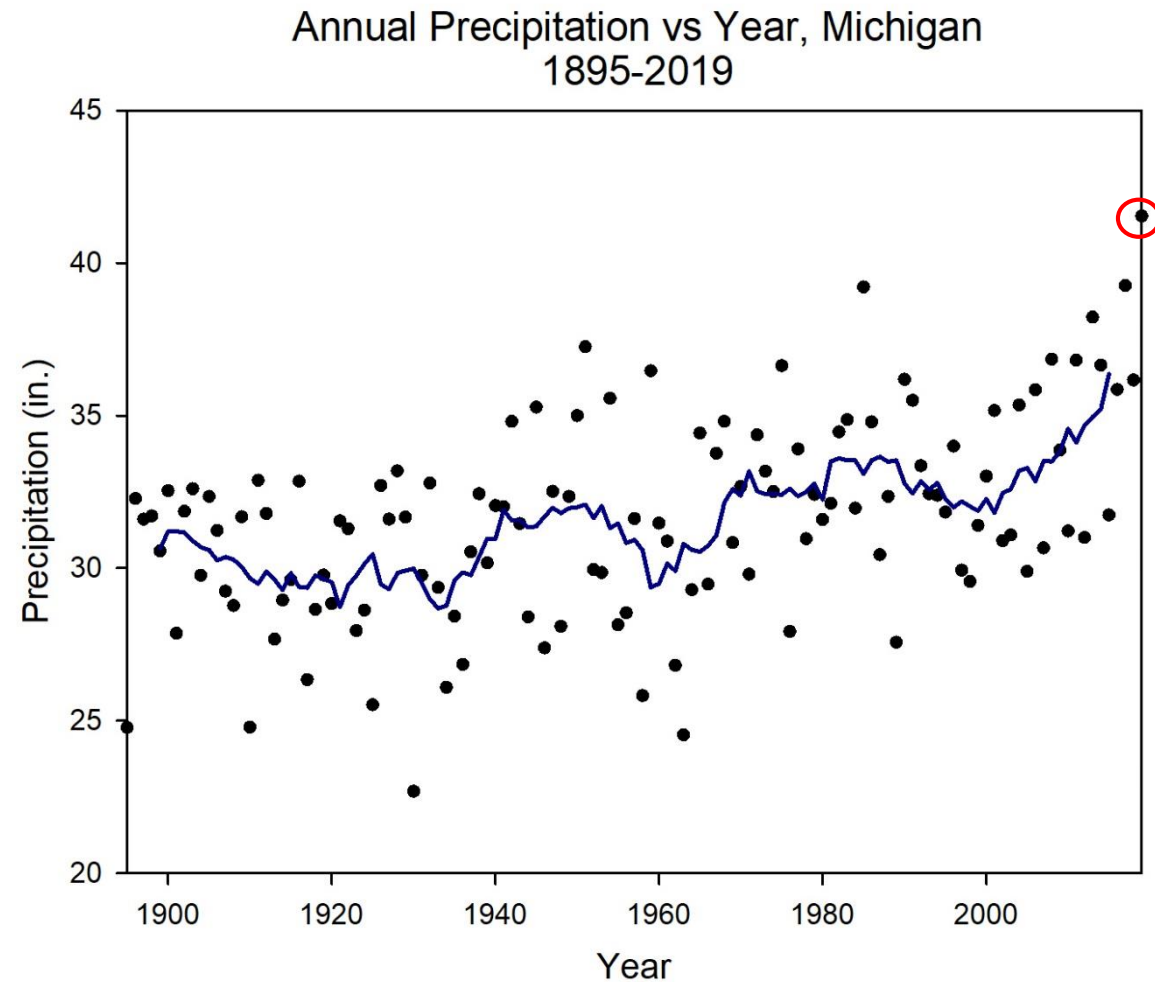


[https://www.cpc.ncep.noaa.gov/products/Soilmst\\_Monitoring/US/Soilmst/Soilmst.shtml#](https://www.cpc.ncep.noaa.gov/products/Soilmst_Monitoring/US/Soilmst/Soilmst.shtml#)

<https://waterdata.usgs.gov/nwis/rt>

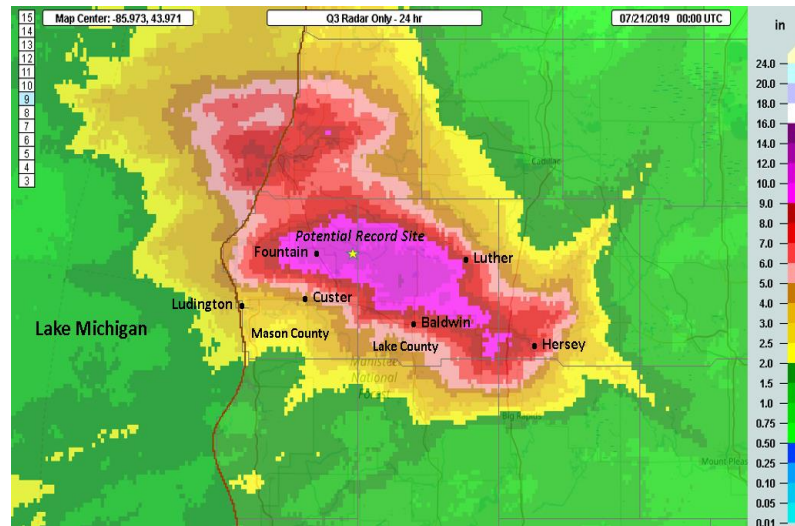
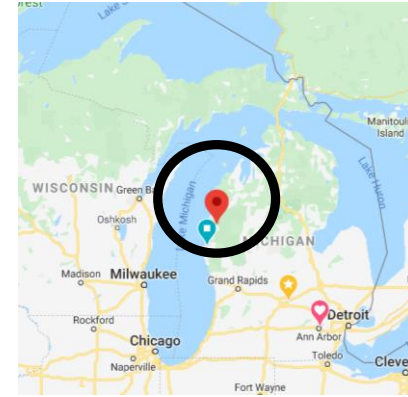


# New Annual Precipitation Records



# New All-Time MI 24Hr Precipitation Record

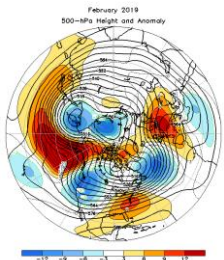
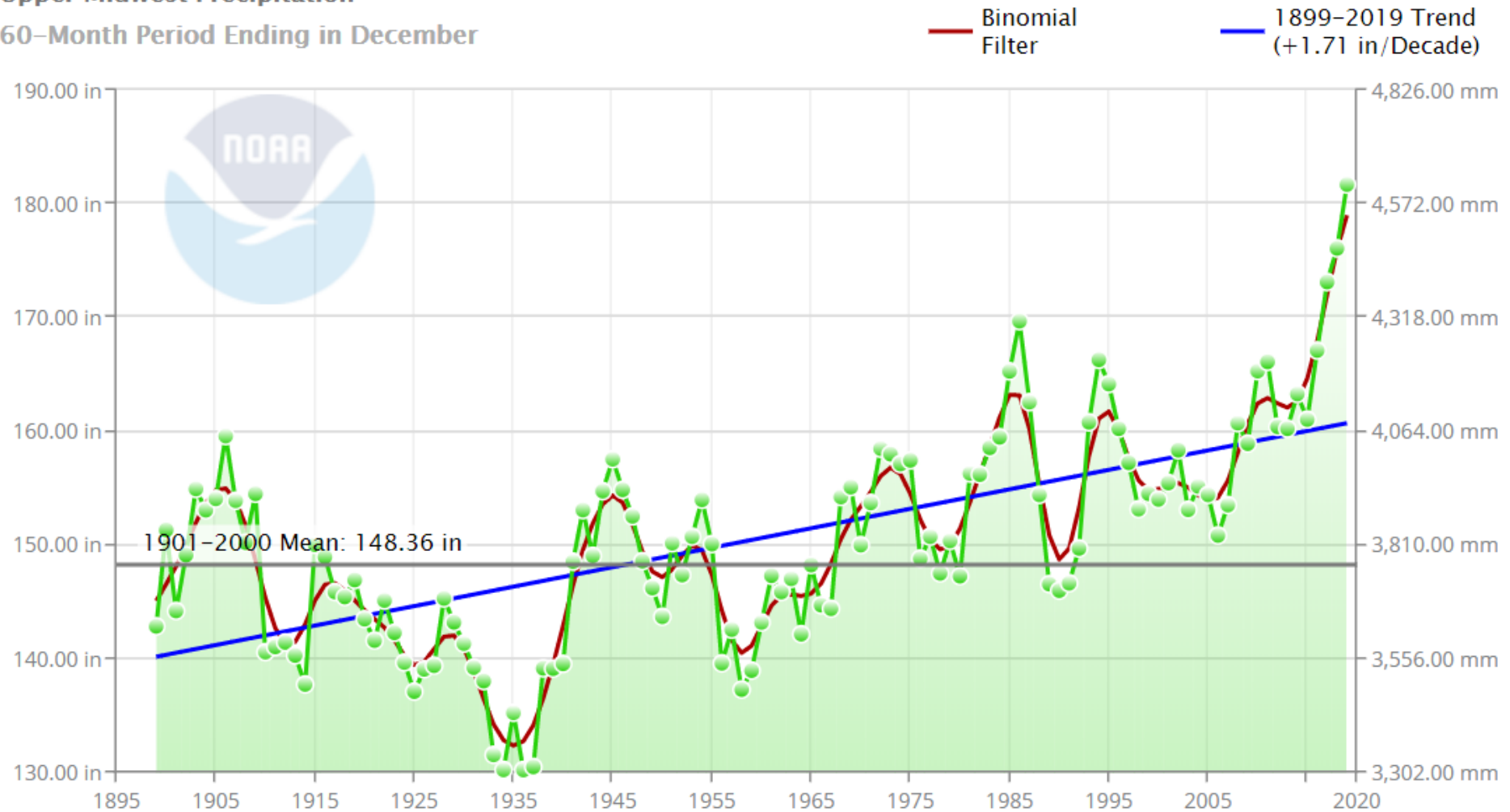
- Several rounds of training thunderstorms impacted west central Lower Michigan during the morning, afternoon, and early evening hours of July 20, 2019 with rainfall rates of 1"-3" per hour.
- The greatest observed total was 12.95" at Fountain, MI (9 mi E)
- Old Record 9.78", August 31<sup>st</sup>, 1914 at Bloomingdale, MI



Source: NWS and MI State Climatologist's Office

# Regional Climate Trending Wetter with Time

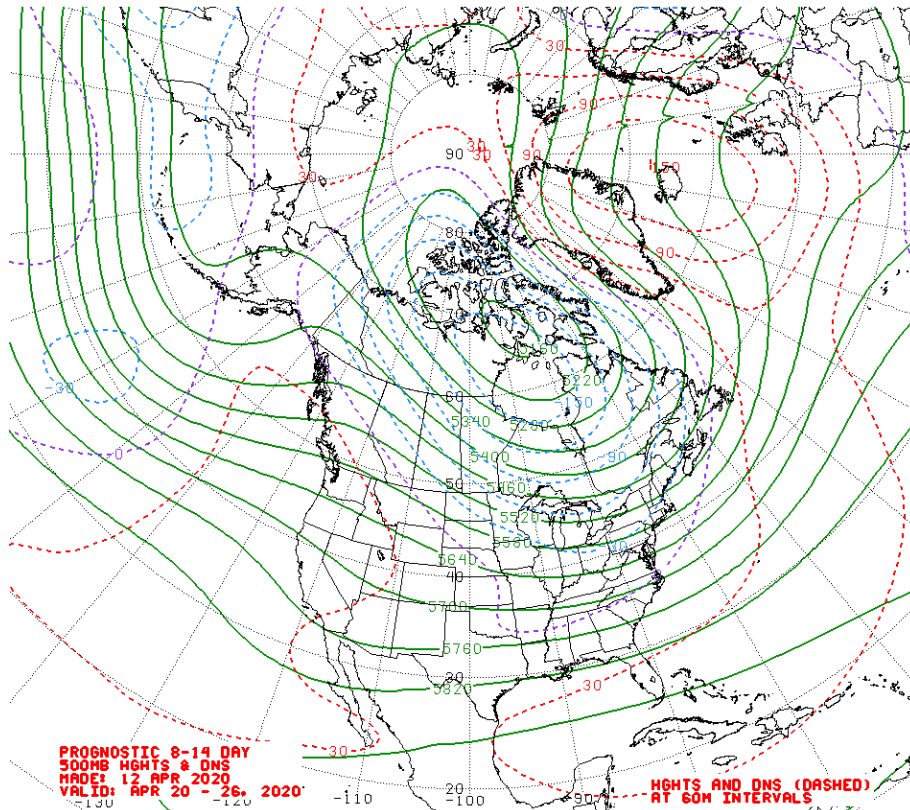
Upper Midwest Precipitation  
60-Month Period Ending in December



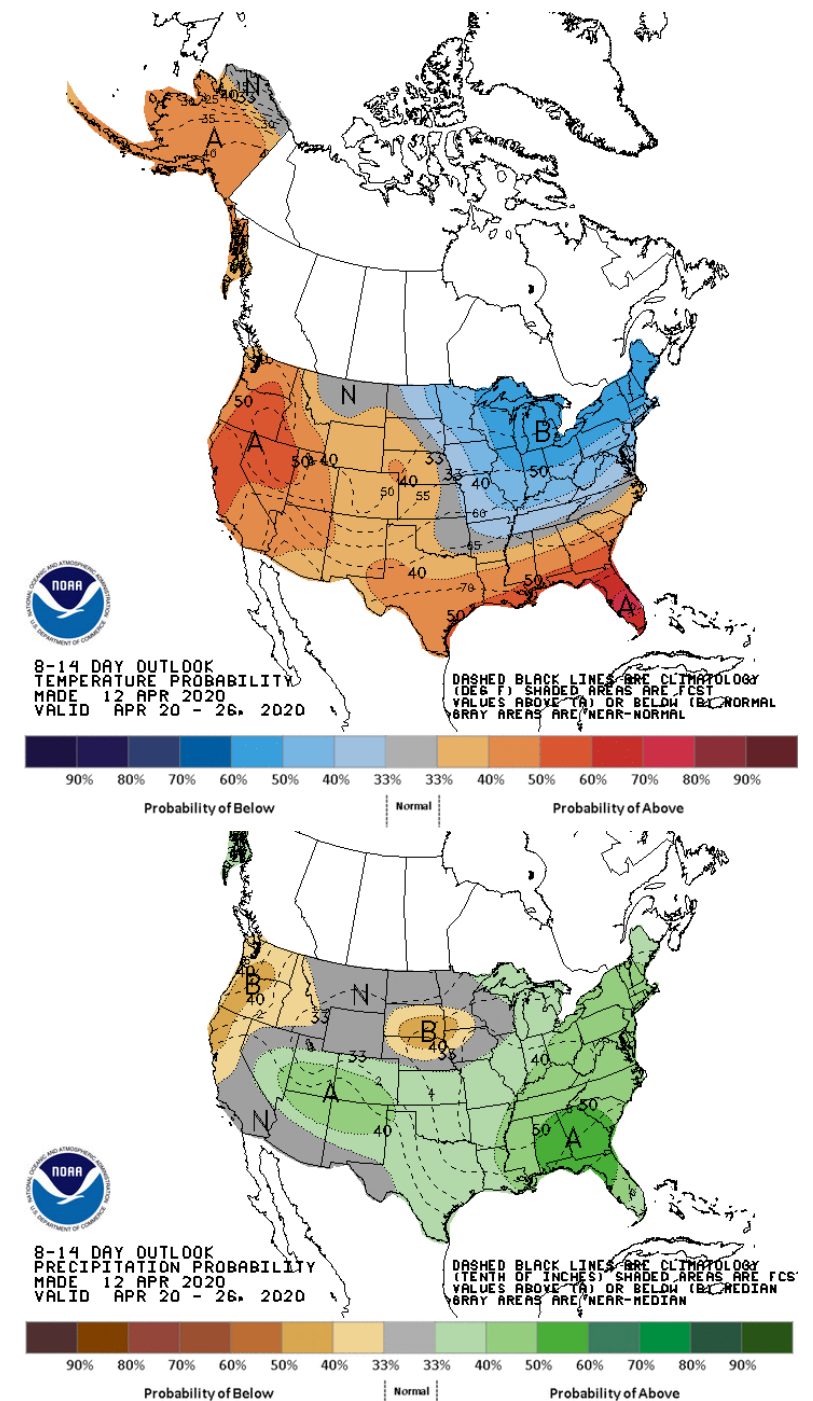


# Monthly/Seasonal Outlooks

# NOAA CPC 8-14 Day Outlook APR 20-26, 2020



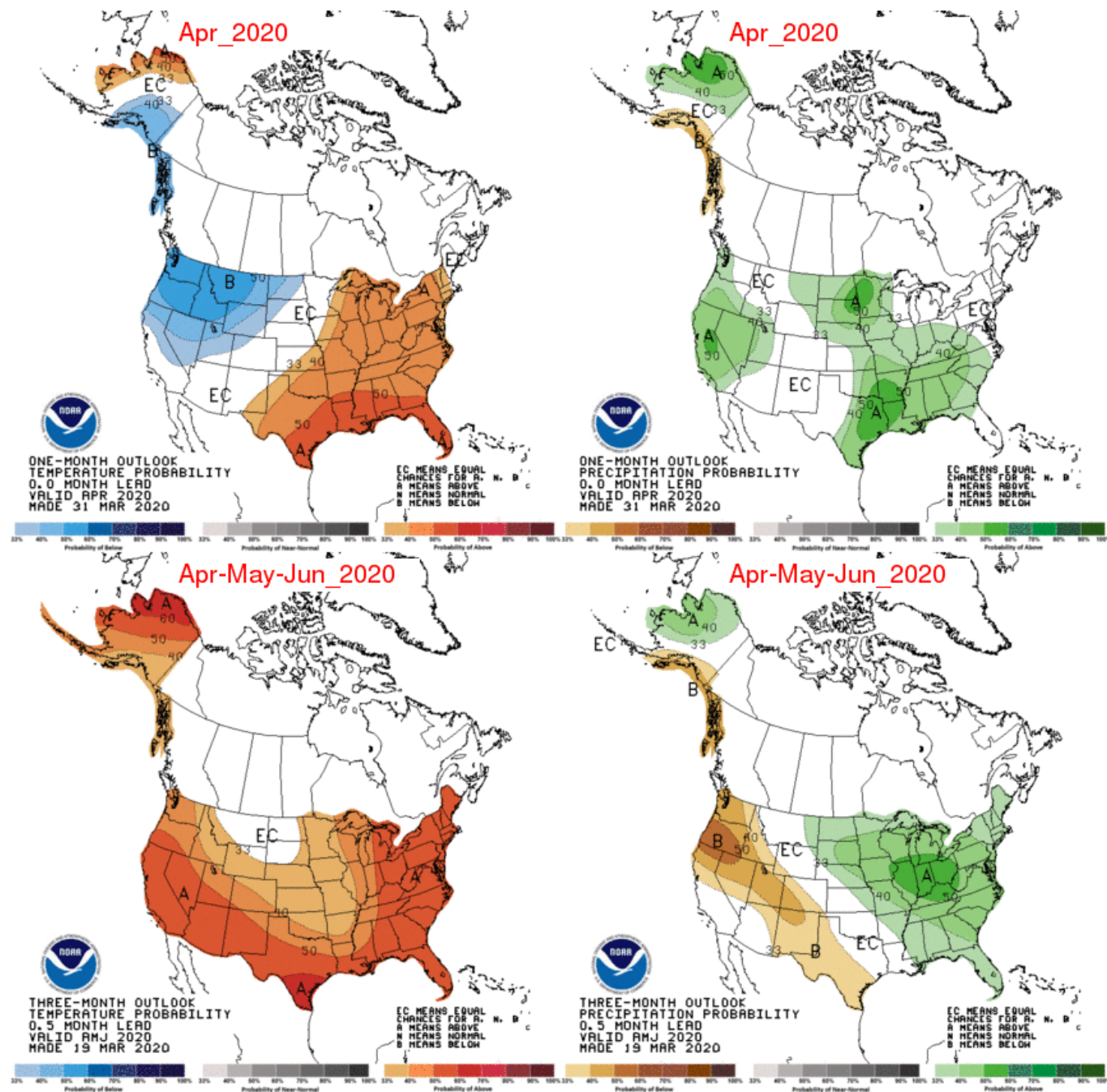
<https://www.cpc.ncep.noaa.gov/products/predictions/814day/>



# NOAA CPC

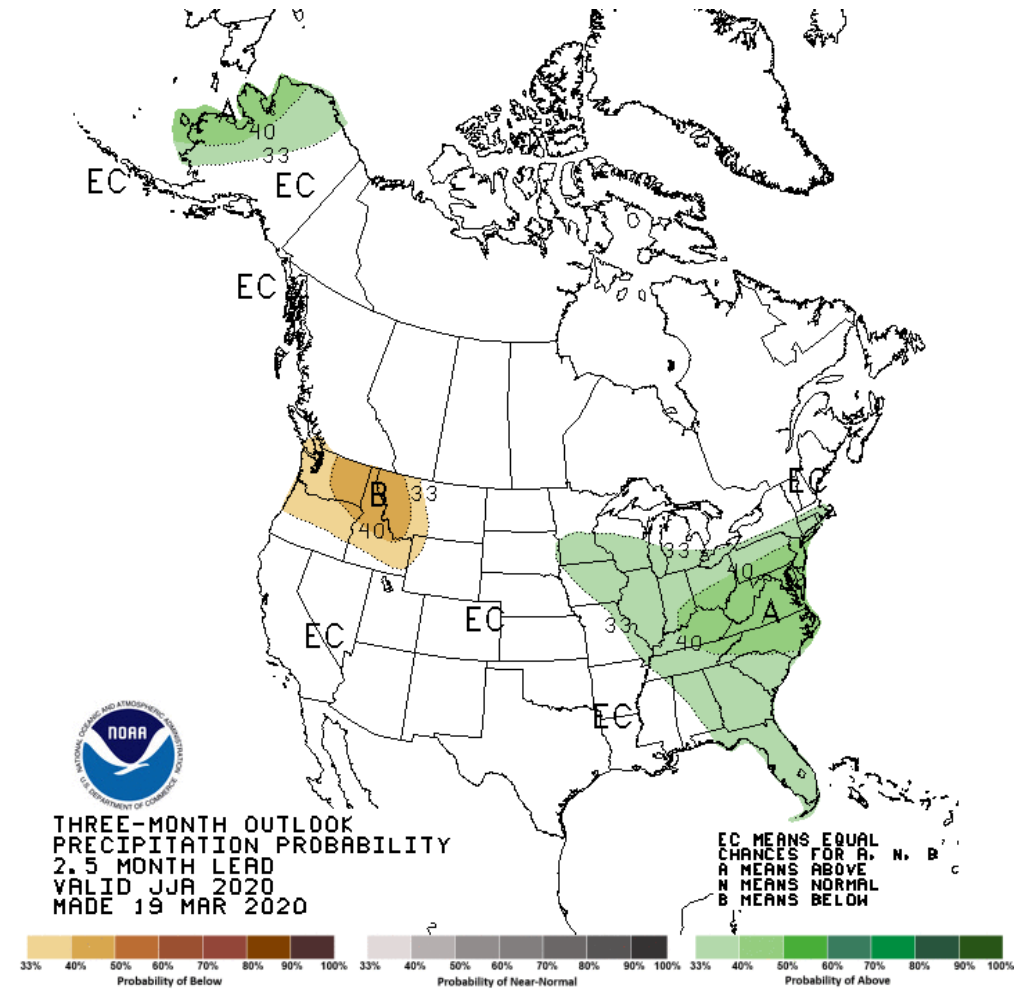
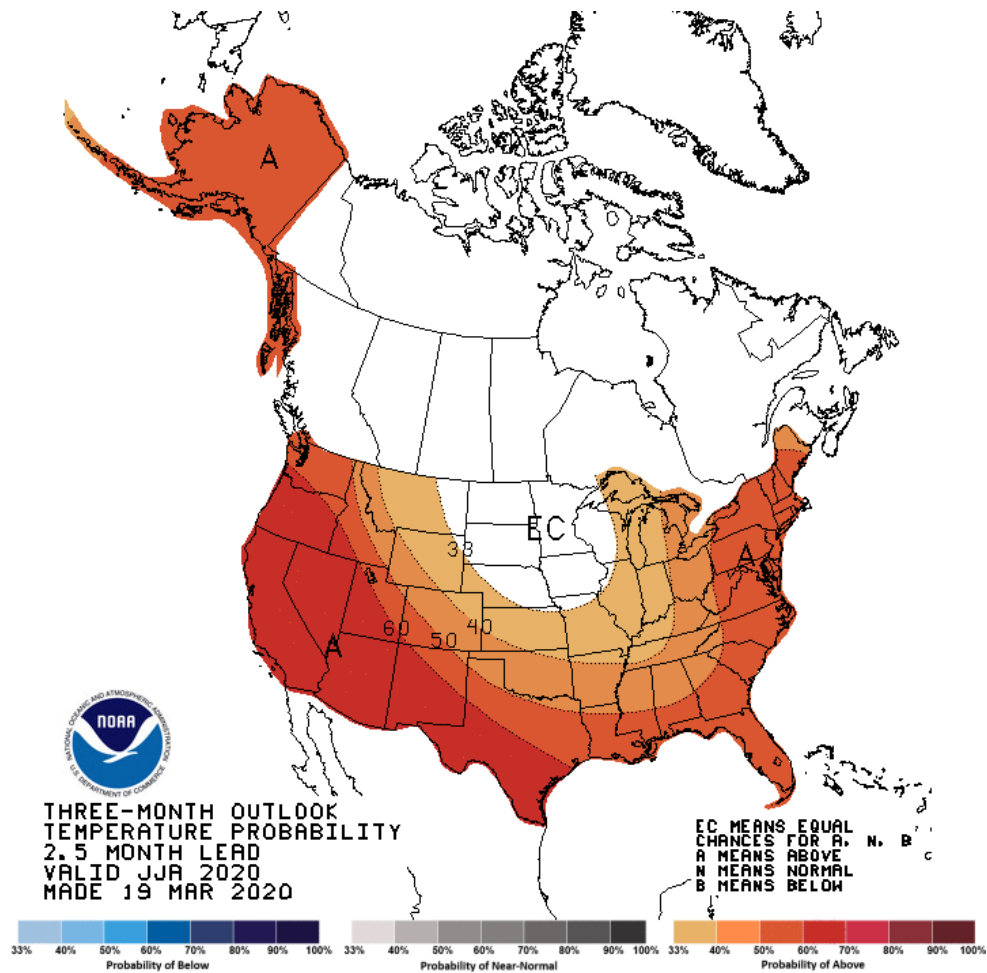
## 1 and 3-Month Outlooks

April - June, 2020



# NOAA CPC Seasonal Outlook

June - August 2020





Thank You!

